

# AVIATION

*The Oldest American Aeronautical Magazine*

DECEMBER 14, 1925

Issued Weekly

PRICE 15 CENTS



Landing on Alaskan Mountain Top.

Photo Sent by Noel Wien

VOLUME  
XIX

## SPECIAL FEATURES

NUMBER  
24

THE BOSTON AIR EXHIBIT  
LESSONS OF SIX YEAR'S AIR TRANSPORT  
REPORT OF PRESIDENT'S AIR BOARD

GARDNER PUBLISHING CO., INC.  
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under Act of March 3, 1879.

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DECEMBER 14, 1925

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VOL. XIX, NO. 24

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### WRIGHT WHIRLWIND 200 H.P. AIR COOLED ENGINE FOR COMMERCIAL SERVICE

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With 1000 pounds payload, the Wright-Bellanca won the Efficiency Race at the New York Air Races—scoring 53½ points thus the most efficient competitor. With full load this plane makes 132 miles per hour, has a landing speed of 42 miles per hour, climbs 900 feet the first minute. It cruises easily at 100 miles per hour, using only 115 of its 200 horse power. At cruising speed the gasoline consumption is 12½ gallons per hour, or 8 miles per gallon. Rugged construction with high safety factors, ample cargo space—122 cubic feet in cabin; comfortable accommodations including cabin heaters, excellent vision for both pilot and passengers; all make for commercial efficiency. For detailed information write for Bulletin No. 14.

#### WRIGHT-WHIRLWIND ECONOMY

For commercial service where reliability, durability and economy are essential, consider an engine so reliable that Cuban pilots in land planes constantly fly to the Isle of Pines over 40 miles of ocean. An engine so durable that Huff-Daland Daring pilots flew 14 of them throughout their seagone without even changing their two spare engines. So economical that commercial airlines are using them in preference to motors of other makes. Such performance is justified by the years of continuous improvement, by the wealth of practical experience gained in producing hundreds of these engines, by the elimination of water cooling troubles, and by the Wright Aeronautical Corporation—the largest manufacturers of aviation engines in America. For detailed information write for Bulletin No. 8.



WRIGHT AERONAUTICAL CORPORATION

Dayton, N. J. U. S. A.

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REDACTED H. UHLM

# AVIATION

VOL. XIX

NOVEMBER 14, 1925

No. 24

### The Aircraft Board Report

**T**OO MUCH cannot be expected immediately of the campaign being conducted for a greater independence of action for the aerial forces of the United States. If such things involve the realization of the ultimate goal, progress has been made.

Viewed from this hopeful viewpoint, the report of the President's Aircraft Board is definitely encouraging. It is the first concrete result of the agitation. Heretofore, all that has resulted has been suggestions and proposals. The Board's recommendations may be considered as definite steps that will be put into effect as approved upon by Congress.

The suggestions made to the President may be divided into two classes: some require Congressional approval and the others needing only Executive endorsement. In the first group may be found the plan for the three Second Assistant Secretaries. With the Second Assistant Postmaster General, the four will comprise a group that will really be an Aircraft Board, should Congress approve the plan. The Bureau of Aeronautics in the Department of Commerce, the change in the law to allow the lifting of controls without legislative backing and the creation of an Air Brigadier General in the Air Service all require Congressional action.

But any of the recommendations can be put into effect by the Army and Navy without further law. Representation of Air Corps (Service) officers on the General Staff, the standardization of aircraft equipment, the recognition of proprietary rights, and many others can be put into effect as soon as President Coolidge gives his approval.

Probably some members of Congress will want the action of the President in having his own board, consisting of eight Republicans and six Democrats, give to the public a report which will give "the good qualities of the Air Service" before the Board's own committee, under the Chairmanship of Mr. Langford of Wisconsin, reports. The primary purpose of the Air Board has not been accomplished. It has gotten under the wing first with a recommendation to the country first to defend the Administration's position.

A great deal, in the long story of aircraft evolution, can be recommended unqualifiedly, but after such good national evidence of great qualities of opinion on the part of some of the members of the Board. With a membership, composed, as it was, of several men with fixed ideas, little more could have been expected without a minority report.

The plan of the Aircraft Board is a step to public opinion. It has, indeed, aroused opposition among the service and will arouse much more if relations are to be considered brotherly. The reason for this is that, instead of permitting greater freedom of action, this plan merely puts over the services another representative of the War and Navy Departments, who will have only such duties as are imposed by the Government. The establishment of Admiral Moffett and General Peck as such a plan can well be imagined. Instead of having direct contact with the Secretary, they

will have another road to traverse before their plans are approved. Congress may decide that this plan will not have a favorable effect and, consequently, may not approve of it.

We are well along in the new Air Corps not to the two new Brigadier Generals. When, however, it is realized how hard it was to select a successor to Brigadier General Mitchell without passing over many officers of higher rank, the new appointments may present no serious problem. The appointment of the General Staff will probably be regarded with satisfaction by us, as we except the Board. Air Officers will not be happy in their new berths as will the General Staff except that the Air Service officers have demanded its recognition with the general public.

The most hopeful sign is that the report does not attempt to settle anything but frankly admits that the controversy will go on to the end. Better have the debate continue than to accept such half way measures as are subverted in the first of the reports.

### Six Years of Air Transport

**M**AJOR GENERAL SIR SEYMOUR BRANDER, in his inaugural address as Chairman of the Royal Aeronautical Society, close to give, "The Lessons of Six Years' Experience in Air Transport."

To those who have been asking the reasons for the slow development of air transport both here and abroad, there will be disappointment in finding an enumeration of recommendations still to be provided before air transport can become satisfactory. The frankness with which Sir Seymour, who is Director of Civil Aviation in the Air Ministry, discusses the causes of the failure of air transport to become a more important service, is to be commended. In these lines of suggested action, it is a relief to find one so optimistic as anxious as General Brander, despite all the statistics that have been discussed in the six years of operating air lines from London to the Continent.

Equally significant is the complete absence of any encouragement given to the growth of traffic. In fact, it may be inferred, owing to his analysis, that in this country before first world reliability, comes a saving power per plane and decrease in expense are achieved, there is little use of discussing the traffic problem.

A study of other forms of transportation shows that the development of the vehicle resulted usually from the growth and demand of traffic. The vehicle was not perfected first. With traffic, whether passengers or goods, available in rapidly increasing volume, the improvement in airplane will follow. To have to expend the large sums required to produce ideal types of air transport machines on the assumption that the traffic will follow, has been too obvious a mistake that has not been made, but it is a step in this development. The manufacturers of aircraft will provide acceptable transport planes as soon as the demand warrants the experimental expense. In other words, the traffic problem is the one that should be solved first.











# The New Four-Engine Bleriot Airliner

Type 155 Evolved from Former Designs Along Similar Lines

FINANCE, with its unrelenting net work of airlines, has, for some years, been experimenting with multi-engine airplanes. Following the experiments has been the Bleriot Co. Their latest plane, type 155, is derived from two previous types, one of which type 215, was fitted with four 185 hp. Hispano-Suiza engines, while type 135 had four air-cooled Hispano engines. In 1923, a machine of type 135 established a new distance record, carrying a load of 2,500 lb., while type 135 won the Grand Prix des Aéroplanes Composites in 1924.

The latest model is similar in general structure to the former types but it is considerably larger in size. It carries 12 passengers besides the pilot and wingman/observer and will be used on the Paris-London service.

## Wing Structure

The wings of the Hispano 155 are of normal lightness structure with a total wing area of 1,044 sq. ft. The span is 85 ft. 3 in., while the chord and the gap are each 8 ft. 10 in. The upper and lower wings are absolutely identical, with neither wing-lift, dihedral nor stagger. They are connected by eight antistressable struts made of light metal tubing. The front and rear wing boxes are of the same depth and carry the same load making it possible to use identical wing fittings and landing gear.

The wings are constructed entirely of wood with the exception of the knees supporting the engine, the landing gear and certain highly stressed parts of the fuselage, which are made of steel, thus ensuring absolute rigidity. There are five antistressable struts.

## Fuselage

The fuselage is arranged to seat 17 passengers in a cabin 18 ft. in length. It is lighted by twenty paraffin lamps which provide the passengers an excellent view, both below and to the sides. Ventilation is obtained by four air vents which can be regulated. Besides the entrance door, which is set on one side of the fuselage, the cabin also has an emergency exit towards the front, and out in the rear.

The horizontal stabilizer consists of a fixed portion, the angle of which can be regulated in flight by means of a wheel operated by the pilot, and the elevators, which are unbalanced. The front vertical fin is in a trapezoidal shape and the aileron is unbalanced.

## Engine Installation

The four engines are set on the leading edge of the wings, on either side of the fuselage, two on the upper stage and two on the lower wings. The propellers of the propellers do not interfere with each other in any way, as the propellers are set at an angle of 15 degrees to the fuselage, and the propellers are set at an angle of 15 degrees to the fuselage, and the propellers are set at an angle of 15 degrees to the fuselage.



The Bleriot model 115 (type 155) by Hispano-Suiza engine) one of the type 155 which the 155 was designed

as the pilot and mechanic. Four 250 hp. Hispano engines are used turning tractor propellers of 8 ft. 10 in. diameter. The cooling is done by a fan-cooled type radiator, trapezoidal in form and attached in front and above the engine. The starting of the engine is done by a compressed air starter built by the Societe Hispano-Aeronautique. The



General layout of type 155

pilot can control the four ailerons while in flight, either together or individually.

The landing gear is placed directly under the two groups of engines, each one consisting of two wheels on a steel tube, in the form of an X. Y. Lateral landing is obtained by four very solid, two in front of the wheels and two behind. These rollers are attached on one side, to the fuselage of the lower wings at the main wing ends, and to the fuselage on the other side. The shock absorbing is done by Bowden leads fastened around the axle and around the main shock.

The tail skid consists of a steel tube, hinged at about two-thirds of its length and strung on elastic cord with a steel plate on the rear end.

## General Characteristics

The general dimensions of the airplane are given in the following table:

Span	85 ft. 3 in.
Length	44 ft. 10 in.
Wing area	1,044 sq. ft.
Wing chord	8 ft. 10 in.
Wing gap	8 ft. 10 in.
Wing tip	8 ft. 10 in.
Wing root	8 ft. 10 in.
Wing tip	8 ft. 10 in.
Wing root	8 ft. 10 in.
Wing tip	8 ft. 10 in.
Wing root	8 ft. 10 in.

## Performance

Speed at ground level	100 m.p.h.
Cruising speed	80 m.p.h.
Maximum speed	100 m.p.h.
Cruising altitude	10,000 ft.

## Air Mail Financial Report

The following is a report of operating expenses for the United States Air Mail Service for the month of September, 1925.

EXPENSE	PERCENTAGE
Maintenance of Way	
Fuel	\$ 1,034.00
Lubricants	\$ 1,034.00
Repairs	\$ 1,034.00
Miscellaneous	\$ 1,034.00
Maintenance of Equipment	\$ 2,400.00
Lubricants	\$ 2,400.00
Repairs	\$ 2,400.00
Miscellaneous	\$ 2,400.00
Transportation	\$ 4,000.00
Fuel	\$ 4,000.00
Lubricants	\$ 4,000.00
Repairs	\$ 4,000.00
Miscellaneous	\$ 4,000.00
Executive method	\$ 5,000.00
Fuel	\$ 5,000.00
Lubricants	\$ 5,000.00
Repairs	\$ 5,000.00
Miscellaneous	\$ 5,000.00
CAPITAL	\$ 40,000.00
Fuel	\$ 40,000.00
Lubricants	\$ 40,000.00
Repairs	\$ 40,000.00
Miscellaneous	\$ 40,000.00
GRAND TOTAL	\$ 100,000.00
Fuel	\$ 100,000.00
Lubricants	\$ 100,000.00
Repairs	\$ 100,000.00
Miscellaneous	\$ 100,000.00
Cost per mile transportation for September	\$ 1,000.00
Cost per mile transportation for October	\$ 1,000.00
Cost per mile transportation for November	\$ 1,000.00
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Cost per mile transportation for January	\$ 1,000.00
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### Effect of Strict Aircraft Regulation

In a recent editorial, *AVIATION* stated the aircraft manufacturers and operators that strict regulation might have a serious effect on the development of commercial aviation in the United States.

A letter was received from Godfrey L. Copley, President of the N.A.A. making an inquiry for further information. His words are follows:

"Referring to the very interesting editorial in your November last number entitled 'Inspection of Commercial Aviation', it would be of great interest to many people if you would describe, in some detail, the features of aircraft inspection in Europe that have clearly contributed to the success of our operations therein referred to."

The National Aeronautic Association is very anxious to see a law passed, which will do as much good and as little harm as possible. Let us, by all means, learn by the mistakes of our friends the European governments, and try to find and apply a plan which will not only benefit the general public, but will also benefit the very considerable class of people who are interested in aeronautics.

The National Aeronautic Association has, as you know, from its foundation, favored a civil bureau of aeronautics in the Department of Commerce to take charge of aviation and commercial flying in this country.

We are very desirous of publishing the most possible accurate in this regard, and even correspondence from all interested and in particular from those who have definite ideas of possible rules that might result from such a bill, and how best to avoid them.

Mr. Copley's letter raised questions that I am in a position to answer regarding inspection and pilots. It has brought a letter, also, from Mr. M. W. Brown, who has

probably flown more often over all European air lines than any other American. He writes as follows:

In general, there are two main considerations, the effect of such inspection on the aviation and industry recently, the effect on the general public. For instance, strict inspection laws of aircraft employed in commercial work might successfully eliminate most of the machines now employed by most of the small independent companies, one-time mechanics. These companies are not financially capable of taking on new equipment, and the result would be the possible elimination of many small concerns who do keep aviation alive in this country. On the other hand, standards which guide only newer because of old machines and old pilots, etc., would also be eliminated. There would then be fewer small concerns but also fewer accidents. From the point of view of improving the strict regulations would thus work, both ways and perhaps retard aviation development. From the point of view of the public the strict regulations would perhaps depend whether contact the general public was less with commercial aviation, but at the same time it might benefit aviation in regard to the public cutting down accidents. I might add here that aviation now in Europe are apt to question the elaborate rules of small licensed concerns, on the same that only organized air lines can bring air transportation properly before the public, and that America has not been actually accepted in commercial aviation. It is a question whether it would be better policy to let our superficially organized concerns which have accidents, or whether the country needs such small concerns in building up the aviation later. The result of strict regulations will result in their elimination.

As for Europe, I can say here that Italy is as strictly regulated that the last private concern in commercial

aviation went out of business two years ago. Mr. Capponi told me recently here that Italy now has strict regulation; as, for instance, the law that provides for strict regulation of aircraft; with the elimination of air office as commander of the field, with the commandable personnel needed before a machine leaves the ground; with inspection laws which for inspection before a machine can leave the ground. This means great delay, as inspection was a slow and slow at the pleasure of the commander. These regulations may not appear unjust, but according to Capponi they succeeded in stifling whatever commercial aviation Italy once had. I might add, here that the proposed case of the failure of commercial aviation in Italy was not regulation, but lack of interest on the part of Italian, the most disinterested, and the general poverty of the country.

### Regulation in England

In regard to England, the effect of regulation on commercial aviation cannot be judged, as there is no commercial aviation outside of the Imperial Airways, a concern so large and so well supported as to be in no fear of regulation as far as operation is concerned. England, however, suffers in its aircraft industry. For instance, a small machine was built last year in England, very light, with a corresponding light motor. The builder hoped the success of his design as lightweight and cheapness. The machine was turned over to the inspection board. By the time they had finished with it the motor was found to be too light in parts, and the suggestion of the board meant a motor too heavy for the plane, and a finished machine altogether too heavy and expensive for any commercial use. In other words, the designer had seen commercial possibility in light cheap machines. The design of the board destroyed the one feature of the machine which could have

made it a suitable product. Furthermore, a well known technical man told me that the machine was no better when changed by the board than it was originally. No Regulation, who understood the situation, blames the Board. The work is in the expert designs, and they are responsible, not only for the design, but they are responsible for the defects which can be traced to their oversight. As engineers, they are confident men, but they have their responsibility to think of. To be on the safe side, they require more use of a safety factor than any designer would otherwise provide for. Furthermore, the longer they remain on the board the more conservative they become, and the designer of any machine can write nothing in every way, but has a large bill before him in satisfying the Board that his ideas are safe. Safety factors may be determined mathematically, in great precision, but some doubt this, and again the Board always goes so far on the safe side as to make impossible a practical light machine. This was imposed upon us by a number of men in England.

### To Conserve Helium in Airships

By a process of electrolysis heating the gas with which Zeppelins are inflated and by gradually cooling it on the land between flights, saving in the use of the two British Admiralty chemists, Dr. Ross Peters and Fritz Hollnagel, believe they have gone a long way toward solving the problem of flying and landing airships without relying on gas, which is dangerous with hydrogen and especially with helium. Great possibilities may be seen in this scheme, especially in that the change of gas volume, necessary at different altitudes and six passengers, can automatically be made without releasing the helium of the Los Angeles to America, 25,000 cubic meters of gas was dissipated, which, in the case of helium gas, would mean a cost of approximately \$100,000.

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**B**UILT for London-Paris airlines around 260 hp. Rolls Royce Falcon engines. A few saucers and pilot. Landing speed slow and takeoff spurs less than 200 ft. climb easier at fast; high speed 120, cruising 100 m.p.h. Ideal ship for cross country especially useful for Air Mail feeder lines. One spare engine and a large stock of spare parts.

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A FAIR buying plan under which a new airplane may be purchased on a cash basis, or a lease plan under which you can have it on a lease basis.

MY EXPERIENCE, and complete engineering and construction facilities are now offered for sale in the design and construction of complete all metal airplanes and airplanes for special military or commercial purposes.

Contractor to the U. S. Navy

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## The Indignant British

*R.A.F. Purchases Air Engines From America; British Goods Ignored; Indignant Traders*

**Note:** After trying, with some success, to cheap obsolete British aircraft engines in the United States, after the complete adoption of the *RAF*, the *Handley Page* purchasing the rights to the *Handley Page* aircraft wing, using British aircraft engines as an experiment to build the *Handley Page*, the *London Evening Post* compares close American competition. The article below is worthy of French—E.

**R**EPRESENTATIVES of a large section of the British aviation industry are growing rapidly more impatient at the Air Ministry's scrupulous preference for foreign goods. The Air Ministry actually is spending the taxpayers' money in purchasing and advertising American air material. It is stated that this official bias, together with America's custom in *Schneider Cup* regulations (not, as having a dominating effect upon foreign markets for British air material). Through an intermediary, the Air Ministry recently placed a *500,000* contract for American aero engines. At the time when it was decided to use this type of engine in quantity for the *R.A.F.*, it had failed to pass the Air Ministry type test. Thus it was forced with preferential treatment over British engines.

The Air Ministry, as already reported in the *Morning Post*, has placed a contract for American designed propellers which, if it is carried through, will reach a total of about *1,000,000*. This American propellers is a crude imitation of a British propeller which was produced, built, and offered to the Government before the American one had been heard of in this country.

### American Aircraft

Large numbers of American designed *Boeing* air-crafts are being purchased by the Air Ministry. Yet, when, some

years ago, a British designer proposed to build aircraft in this country, the Air Ministry told him that it would not allow him to be used as an American one which it had control. (These orders for foreign air material are production orders. Experimental orders are of course, profitable.)

Finally, the Air Ministry has sent certain Royal Air Force officers on a flight from Cairo to Kano (Nigeria) to show the British flag in western Africa with American engines.

America is undoubtedly our strongest rival. We are no longer our first with some of money intended for our own use and exports needed to us.

"When the Air Ministry gives a little practical help to our own manufacturers instead of to other men," said a well known unassociated authority yesterday, "our industry is in very grave danger of losing its former markets altogether. While the Ministry continues, as it does, to broadcast its opinion that British goods are inferior to American ones, how can we expect foreigners to buy our products?"

British manufacturers of Air Ministry policy are being oppressed by American, sales managers, Germany, and Italy. It is generally agreed that we are now at the parting of the ways.

If we choose the wrong path we may soon realize that a small number of our goods.

Producers, who must upon their words, keep in spirit from these manufacturers who must in open competition, allow in air engine or in naval machine, that their machines are equal to the world's best. British manufacturers believe that they are now that good.

But in order that they may do so the Air Ministry must first free them (as it has been too willing to free the American) from crippling restrictions, and it must divert its British construction the financial support it now lavishes upon American goods.—The *Morning Post*

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**AVIATION**  
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This is the advice of one of the largest dealers in aircraft parts and supplies, who understands advertising and uses it consistently to expand his business. In a letter of September 28, to AVIATION, this advertiser (name upon request), after telling how, by the key system, he has proven the exceptional advantages of AVIATION advertising, concludes as follows:

"Regardless of how much is spent with you or others, the cost per inquiry is substantially lower in AVIATION than in any other paper."

"Every paper in the field claims to give the lowest cost per inquiry, which is only natural, but I KNOW, I have proven it over a long period."

Reduce Claims to Facts by "KEYING" YOUR ADS.

**AVIATION**

100% Coverage of the Flying Field

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Aviscos, aeronauts, aeronautical engineers, aircraft manufacturers, flying officers of Army, Navy and Marine Corps, Air Mail personnel, aircraft accessories manufacturers, flying field owners, American aces, aeronautical instructors, inventors, National Guard air officers, aeronautical writers, sportsmen, men prominent in aeronautical affairs.

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Enclosed please find Two Dollars for copy of Who's Who in American Aeronautics.

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### The R38 Memorial Prize

From the income of the R38 Memorial Fund a sum of twenty-five guineas will be offered as a prize for the best paper received by the Royal Aeronautical Society on any subject of a technical nature in the sphere of aeronautics. Other things being equal, preference will be given to papers which relate to aerodynamics.

The prize is open to international competition. The Royal Aeronautical Society reserves the right to withhold the prize in any year if it is considered that no paper is of sufficient merit to justify its award.

Interested aeronautists should send their names to the Secretary of the Royal Aeronautical Society, 7 Abchurch Lane, London, E.C. 4, on or before December 31st, 1932, with such information in regard to the proposed scope of their paper as will enable arrangements to be made for their consideration. The closing date for the receipt of papers will be March 31st, 1933.

Papers which must be submitted in either French or English, should in all cases be typed, and a copy should be submitted by the author as this Society can take no responsibility for the loss of papers submitted in it.

Special prizes will be awarded to the authors of the best papers and in most instances be published in the JOURNAL of the Royal Aeronautical Society. A signed acknowledgment must accompany each paper to the effect that publication has not already taken place and that the author will not communicate its substance without the Society's consent in published form.

The Society attaches special importance to papers showing original work, and also acknowledges work may be made by the author of the source of any special information.

### Aeronautical Instrument Research

The aeronautical instruments section of the Bureau of Standards has indicated, during the past year, the program of cooperative research and development work on aircraft instruments with the National Advisory Committee for Aeronautics.

tion, the Navy, the Army, and other Government departments and private concerns. In addition, a much larger amount of modern testing of instruments has been done during the past year than ever before. The most important aspect of the instrument development has been the design and construction of a number of special test instruments for studying the performance of heavier-than-air craft. A small gnomon for use in a turn indicator, a small and highly sensitive barometer, and an electric resistance type thermometer for measuring very low air temperatures, have been completed for the National Advisory Committee for Aeronautics. A compass, which can be used for obtaining photographic records of the area straddled, has been developed. This instrument photographs, on a strip of sensitive paper, the earth's surface, the shape of a building, land, and visible reference points. A small developing tank accompanies the instrument and allows finished prints to be obtained within ten minutes of the exposure. An altimeter, compensated for air temperature, has been constructed and sufficient altitude determined by pressure and temperature with an accuracy of 3 per cent.

### 13,566 Feet in Light Plane

The Royal Aero Club of Great Britain recently awarded a certificate of performance to the Wes-ly light plane, showing that, in August, at Bromley, England it reached a height of 13,566 ft. This is one of the light planes which figured in the Empire trials, and is fitted with a Bristol "Chamois" engine, similar to that with which the Pencil "Rover" is equipped.

### Substitutes for Parachute Silk

An investigation under way at the Bureau of Standards, though not yet completed, indicates that, with proper treatment, a cotton fabric may be produced which will be a satisfactory substitute for the imported silk now used for parachutes.

## AIRPORTS AND AIRWAYS

### Fine Flight with Wright Engine

A report from the Naval Air Station, San Diego, Calif., as the ocean-continental flight made by Lieut. S. H. Wynn, U.S.N., from San Diego, Calif. to New York and return has been received at the Navy Department.

Lieutenant Wynn, flying a SDW plane with a Wright T4A engine was the air man, more than 200 lb. and carried approximately 2500 lb. on wing fuel tanks, in a paper where there were very rough weather conditions. He had during the flight one forced landing, which was ended by the failure of a wheel at about 1000 ft. He experienced few engine troubles and none of a serious nature.

Lieut. S. H. Wynn, it is reported will be chosen to command the contemplated Alaska mapping expedition, which will be undertaken next year. The personnel for this expedition will be completed at San Diego Air Station, shortly after the first of the year.

### Ford to Carry Air Mail Between Detroit and Chicago and Detroit and Cleveland

The contract for carrying air mail between Detroit and Chicago and Detroit and Cleveland was awarded on Nov. 27 to the Ford Motor Company. It will bring the Western coast delivery to Detroit within the hour, shorten the time for transportation of California mail to Detroit by fifty hours and expedite Detroit and to and from Chicago and Cleveland.

The contract calls for transportation of mail on the regular Chicago and Cleveland Ford air express lines at the usual rate of 16 cents per pound for all "freight" less than 1,000 miles in length. The service will start shortly.

### Captain Lonsdale Injured

Captain Lonsdale of the French pilot was the Liberty Engine Squadron supply at the St. Etienne field air crash the fall of 1931. He had been flying a plane, was badly injured in an automobile accident on Nov. 28. The automobile in which he was riding crashed into a wall near Villeneuve, France.

### World Flight Plans Preserved

The "Century" one of the planes which completed the Round the World Flight, has arrived at Washington to be preserved as an historic relic in the Smithsonian Institution.

### Self Styled Madcap

One of our correspondents writes: "I am, in the opinion of our mutual friend, Cy Caldwell, a Madcap. I have attached myself to this airplane movement like a leech. The purpose of doing so, on my part, is to boost this community and hence benefit myself. Then, a Madcap."

The writer has not in several lines of news which were of great interest to our readers. Being a newspaper man he has helped aviation through the local press, in fact, there is some ground for belief that some of those whom the pilots call "Madcaps" may be of some use after all.

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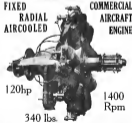
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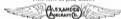
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### The Alexander Eaglerock

Engine—of design that will appeal to all eyes.  
Performance—will, on OX-5 motor that will delight the professional pilot.  
Stability—this means safety and economy of operation.  
These are facts you see the new Eaglerock.  
Price 1932 in field, Denver.



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THE TRADED MACHINE

30,000 Radiators in working

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# Flying in the Far North

Several noteworthy trips were made this summer in Alaska by Noel Wynn using the Fokker plane shown in the illustration. On one of these, from Fairbanks to Nome, five people were carried, giving a total load, including gasoline, of 1,500

# Davenport, Iowa

General Manager Paul Henderson of National Air Transport, Inc., was here recently, with an interesting load of passengers, traveling over the route of the company's Chicago-Dallas round-trip contract. With him were his assistant



Red Pine, Alaska's commercial shaft, shown leading to the Eastern Mountains at a gold mine 100 miles north of the Arctic Circle.

14. The field from which the take off was made was only 1,200 ft. long. On the return flight the Yukon was so high that there were no mountains in sight, so the 300 miles was made non-stop in seven hours. On another trip from McGrath to Nome, three passengers, their baggage and 200 lb. of gold ore, valued at \$15,000, were carried. The landing field at McGrath is a sand bar on the Kuskokwim coast. The distance from Nome to McGrath is about 250 miles and Wynn made the round trips there during the summer.

Mr. Henderson and his party were given a look-over at which General Henderson told of its plans.

Aviation News here note with interest that Olin Stephens is about to establish a commercial field, the Chamber of Commerce there requesting with commercial flyers in the project.

# WACO

Real performance in a three place ship with a stock OX-5 motor

Highest Speed  
Highest Cruising Speed  
Lowest Landing Speed  
Best Speed Range  
Quickest Take Off  
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Steel Fuselage  
Steel Engine  
Oleo Type Landing Gear  
Thirty Seven Gallon Fuel Tank  
Free Air Radiator

Do you want the best?

THE ADVANCE AIRCRAFT COMPANY  
TROY, OHIO

Don Moore is also planning to enlarge its facilities. Development field was closed last spring, leaving the Malone field, almost as close, the present dependence of flyers landing at the Tri-States.

# Joint Steamer and Plane Service

Establishment of a joint air and steamer service for business of connecting passengers from Miami, Fla., by air to Palm Beach and Jacksonville, was announced on Nov. 25, by R. G. McElroy, passenger traffic manager of the Atlantic Line. Mr. McElroy describing the arrangement as "the first joint service between airplane and steamer lines," announced that the service had been inaugurated with a Loring air route on the afternoon of flying service of Miami.

Passengers will arrive in Palm Beach from Miami, within thirty minutes on a special two and a half hour by rail. They can be transferred to Jacksonville within three hours by air on special expedient hours by rail, the announcement said.

# Peoria News

Most of the Peoria fliers are getting ready to hibernate for the winter and are busy storing their planes. So far as we know the only activity at Peoria this winter will be the operation of the Varney Island of Flight, which will operate right through the winter as it has done for a number of seasons. Plans are at this time being prepared for the winter flying.

One Peoria flier has added a new name to that old song, "It ain't Gonna rain no more," as follows:  
In the region, they fly to  
The weather, they fly to  
The weather, they fly to  
They fly to the sky, they fly to the sky.

# Flying Santa Claus

Phonics Aviation has an interesting job on Saturday, Nov. 27, for Ed Brothers Department Store, Philadelphia, which may offer a surprise to other commercial flying fliers for winter flights.

Santa Claus, wearing all the fun and wisdom of the traditional King of the Children, was given a special ride in the city as an imaginary trip from the North Pole. Pilot Ben Paulsen landed him at the Princeton Flying Field at Bryn Mawr, just above Philadelphia, where he was taken to a motor and with a just as sweet to Ed Brothers store, where he was welcomed for the holiday season. Newspaper photographers made pictures of the landing and the stout was given wide publicity in the newspapers and over radio station WJLA, the Ed Brothers station. The stout was welcomed by Henry Edwards, known to a million children for his Deane Holiday bedtime stories. Pilot Paulsen flew a Curtiss Oriole.

# Maline, Ill.

By W. B. Miller

Maline is on the newly created air mail route from Chicago to Dallas, Tex. This is a route of 1,000 miles between Maline and one city of a community of often representing more than 100,000 persons, all of whom have recently become admirers interested in commercial aviation. There is no doubt that when the tri-city folk learn that airplanes usually go where they want, they will naturally begin to think of the advantages of commercial flying, not only in saving their time, but in saving money and making trips by airplane when business is necessary.

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## United States Air Forces

## Belton Forced Down in Storm

A low balloon from the Lohsbach Naval Air Station was forced down in a blinding snowstorm at Bensenville, Ill., twelve miles from Elmhurst, N. Y., on Dec. 1. *Lower Roman J. Miller, one of those officers in the balloon, suffered a leg injury when he was blown against the stormy ground.*

The balloon left the air station on the night of Nov. 30. *Helms Lieutenant Miller, Lewis V. A. Clark and M. J. Walker and P. J. O'Brien, a Philadelphia newspaper man, were in the balloon.*

## Navy Pigeons

The following sets forth the policy of the Bureau of Navigation as regards the Naval Pigeon Service.

The present authorized complement of Air Stations with respect to pigeons will be maintained for the present and existing resources held in qualified pigeonmen become available.

The policy of retention of men and shore duty for enlisted personnel in so far as it affects these particular specialists will be held as objective.

In order to have available the sixteen pigeons now authorized and to provide for attrition, the Bureau will assemble a small class at the Pigeon school at Annapolis some time in the future. To this class will be assigned men of any rating who periodically request such training and who are regarded as suitable material.

The pigeon in the left at San Diego (75 in number) considered a class at 11,000 miles from the middle of October.

The Navy birds from the Hampton Roads left were placed in the Tin State class held at Norfolk. Of the twenty birds returned in this class, seventeen were awarded prizes as follows: 1 championship prize, 4 first prize ribbons, 2 second prize ribbons, 3 third prize ribbons, 3 fourth prize ribbons, 3 fifth prize ribbons.

Of the excellent Navy birds taken on the expedition, only three returned from the first test flight. It is thought a specimen of best specimen in Norfolk is included in the other seven. This experience has precedent in previous attempts to supply pigeons in the family, none of which were successful.

## Army Air Orders

Following officers A. S. Price, Fly Sch., Brooks Field, to duty San Diego: *Capt. Edward F. Smith, First Lt. Clough F. Gray, Sen. Lieut. Donald H. Harman, George W. M. Dudley and August W. Franklin.*

First Lt. Charles H. Harman, A. S. Choate Field, to New York City, ending Jan. 21 for the Panama Canal Zone.

First Lt. Carlisle S. Johnson, A. S., upon completion of tour of foreign service to duty in the off. Chief of A. S., Washington.

First Lt. Leslie F. Arnold, A. S., San Diego, to San Francisco, for temp. duty, upon completion of which to Los Angeles, to assume duty as Gen. Off. of Los Angeles air port.

First Lt. James L. O'Brien, A. S., Fairchild, to temp. duty Omaha, upon completion of which he will proceed to Little Rock, take station and pass to det. off. lat.

## Navy Air Orders

Lt. Comdr. Arthur B. Simpson det. Aircraft Spies. Det. Flt. to New Air Ship, San Diego.

Lt. (jg) Austin K. Day's det. Aircraft Spies. Det. Flt. to New Air Ship, Pensacola.

Lt. Edwin E. Gale (SC) det. New Air Ship, N. Y. State, to New Air Ship, Ft. Mifflin, Pa.

Lt. (jg) George Van Doren det. U.S.S. Memphis to Aircraft Spies, Battle Fleet.

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